

WHAT IS CLAIMED IS:

1. A circuit module comprising:
  - an insulating base including a circuit board having a
  - 5 first wiring pattern;
  - a sidewall protruding from the circuit board to define a cavity;
  - at least one first electrical component disposed in the cavity; and,
- 10 a lid dimensioned to cover the cavity and having a second wiring pattern,
  - wherein the first and second wiring patterns are connected by at least one connecting conductor.
- 15 2. A circuit module according to claim 1, further comprising:
  - at least one second electrical component fixed to the lid,
  - wherein the lid is placed on the sidewall such that the
  - 20 at least one second electrical component is disposed in the cavity.
3. A circuit module according to claim 1, wherein the at least one first electrical component is fixed to the circuit board.
4. The circuit module as in claim 1, wherein the circuit board comprises laminated substrates.

5. The circuit module according to claim 1, wherein the sidewall has at the least one connecting conductor disposed  
5 therein.

6. The circuit module as in claim 1, wherein the at least one connecting conductor is disposed on an inside surface of the sidewall.

10

7. The circuit module according to claim 1, wherein the insulating base further comprises a partitioning wall disposed in the cavity, partitioning the cavity.

15

8. The circuit module according to claim 7, wherein the at least one of the partitioning wall and the sidewall contains the at least one connecting conductor disposed therein.

20

9. The circuit module according to claim 1, wherein the lid comprises a multilayer substrate.

25

10. The circuit module according to claim 9, wherein the multilayer substrate comprises a low-temperature calcined ceramic.

11. The circuit module according to claim 1, wherein the lid has mutually facing electrodes disposed on inner and

outer surfaces thereof so as to form a capacitor.

12. The circuit module according to claim 11, wherein  
the electrode disposed on the outer surface of the lid is  
5 accessible to permit trimming to adjust a capacitance of the  
capacitor.

13. The circuit module of claim 1, wherein an outer  
surface of at least one of the lid and the insulating base is  
10 coated with a metallic layer.

14. The circuit module according to claim 1, wherein  
the lid comprises a metal plate and an insulating film bonded  
to the metal plate.

15

15. The circuit module according to claim 14 wherein  
the insulating film has the second wiring pattern disposed  
thereon and at least one second electrical component fixed to  
the insulating film.

20

16. The circuit module according to claim 15, wherein  
the insulating base further comprises a partitioning wall  
disposed in the cavity, partitioning the cavity.

25

17. The circuit module according to claim 16, wherein  
the at least one conductive connection disposed within at  
least one of the sidewall and the partitioning wall.

18. The circuit module according to claim 14, wherein the metal plate further comprises bent portions projecting approximately orthogonal to a surface of the metal plate.

5       19. The circuit module according to claim 18, wherein the lid is placed over the cavity and the bent portions are attached to the sidewall.

10      20. The circuit module according to claim 19, wherein the bent portions are attached to the sidewall by solder.

21. The circuit module according to claim 19, wherein the bent portions are attached to the sidewall by an adhesive.

15      22. The circuit module of claim 1, wherein the at least one connecting conductor is a conductive paste.

23. The circuit module according to claim 1, wherein the insulating base comprises a low-temperature calcined 20 ceramic.

24. The circuit module according to claim 1, wherein the sidewall completely surrounds the cavity.

25      25. The circuit module according to claim 24, wherein the lid is attached to the sidewall such that the cavity is hermetically sealed.

26. The circuit module of claim 1, further comprising lands attached to the second wiring pattern.

27. The circuit module of claim 26, wherein the lands 5 are disposed such that the lands contact the at least one connecting conductor when the lid is placed over the cavity.

28. The circuit module of claim 1, wherein a relief is provided in the sidewall exposing a surface of at least one 10 of the at least one connecting conductor at a lower surface of the insulating base.

29. The circuit module of claim 28, wherein the exposed surface of the connecting conductor comprises a connection to 15 a mother board.

30. The circuit module of claim 1, wherein outer peripheral surfaces of the insulating base and the lid are coated with a metallic layer.

20

31. The circuit module of claim 30, wherein the metallic coated outer peripheral surfaces form an electrical shield.

32. A circuit module comprising:  
25 an electrically insulating base including a first wiring pattern;  
a sidewall protruding from the base so as to define a cavity;

at least one first electrical component disposed in the cavity; and

a lid formed so as to cover the cavity and including a second wiring pattern, the lid having at least one second  
5 electrical component fixed thereto,

wherein the lid is fixed on an upper surface of the sidewall so as to cover the cavity such that the at least one second electrical component is disposed within the cavity, and the first and second wiring patterns are connected to  
10 each other with at least one connecting conductor.

33. A method of fabricating a circuit module, comprising:

forming an insulating base having a first circuit  
15 pattern;

forming a cavity by forming a sidewall extending orthogonal to the insulating base;

placing at least one first electrical component within the cavity;

20 forming a tabular lid having a second circuit pattern;

placing at least one second electrical component in contact with the lid;

orienting the lid such that the at least one second electrical component is located within the cavity; and,

25 connecting the first and the second circuit patterns via at least one connecting conductor.

34. The method of claim 33, wherein the at least one connecting conductor is disposed in the sidewall.

35. The method of claim 33, wherein the at least one connecting conductor is a conductive paste.

36. The method of claim 33, further comprising partitioning the cavity.

10        37. The method of claim 33, wherein the lid has mutually facing electrodes disposed on inner and outer surfaces thereof so as to form a capacitor.

15        38. The method of claim 33, further comprising coating outer peripheral surfaces of at least one of the lid and the insulating base with a metallic layer.

20        39. The method of claim 33, further comprises bending portions of the lid such that the portions project approximately orthogonal to the surface of the lid.

40. The method of claim 39, further comprising placing the lid over the cavity and attaching the bent portions to the sidewall.

25

41. The method of claim 33, further comprising forming the sidewall such that the sidewall completely surrounds the cavity.

42. The method of claim 41, further comprising attaching the sidewall to the lid such that the cavity is hermetically sealed.

5

43. A circuit module, comprising:  
an insulating base;  
means for electrically connecting to at least one first electrical component disposed on the insulating base;  
10 means for forming a cavity such that the at least one first electrical component is disposed in the cavity;  
an insulating lid;  
means for electrically connecting to at least one second electrical component disposed on the lid;  
15 the insulating lid oriented such that the at least one second electrical component is located within the cavity; and,  
means for electrically connecting the insulating base electrical connection means and the insulating lid connecting means.

20

44. The circuit module of claim 43, further comprising means for partitioning the cavity into multiple cavities.

45. The circuit module of claim 43, further comprising  
25 means for shielding the circuit module.

46. The circuit module of claim 43, further comprising means for attaching the insulating lid to the insulating base.

47. The circuit module of claim 43, further comprising means for hermetically sealing the cavity.

5        48. The circuit module of claim 43, further comprising means for connecting the first electrical component connecting means to a mother board.